

pi-top^[4]

ROBOTICS KIT

Power your robotics projects with
computer vision and applied AI.



Visit
[pi-top.com/
RoboticsKit](https://pi-top.com/RoboticsKit)
for more
information

Robotics & rapid prototyping with Raspberry Pi

This highly versatile kit has all the components you require to build a fully autonomous vehicle and can be configured to suit a huge range of custom robotics projects. The pi-top [4] Robotics Kit enables you to iterate quickly and seamlessly, the aluminum plates and nylon rivets are designed to be simple to put together whilst ensuring absolute rigidity for your finished robotics project.

50+

Aluminum Construction Pieces



Computer Vision / AI



Modular Hardware



pi-top [4]

Expansion Plate

Robotics Kit

\$199.90

Robotics Kit with Expansion Plate
pi-top [4] not included

Conquer any terrain

Give your projects the full range of motion that they require with two modular servo motors, compatible with 3rd party or pi-top magnetic sensor modules for maximum configurability.

Our 12V high-torque geared motors with hall effect sensor tachometers have universal wheel fittings, allowing you to use a range of aftermarket wheels or tracks for your project.

Infinite build configurations

Pan-tilt camera mechanisms, panning obstacle avoidance, tilt-roll head motion, interaction and manipulation of objects with robotics arms - just a few of the functions the pi-top [4] Robotics Kit is capable of.

Expansion Plate

The pi-top [4] Expansion Plate is a versatile interface for any project. It delivers a range of voltages (up to 12 volts) and includes everything you need to drive the motors and servos in this kit. Includes an IMU with accelerometer, gyroscope and magnetometer.

The pi-top [4] Expansion Plate plugs and plays seamlessly with the pi-top [4] Robotics Kit and pi-top [4], which functions as the robot's brain.

Use our Python and Microsoft's .NET libraries to code projects using:



Gesture Control



Obstacle Avoidance



Face Tracking



Autonomous Driving



Line Recognition



Object Recognition



Interaction



Emotion Mapping

Works with Microsoft

.NET

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What's included?

pi-top [4] Robotics Kit

pi-top [4] and Expansion Plate required

- 2x high accuracy geared encoder motors
- 2x modular servo motors
- 1x HD 720p wide-angle camera module
- 1x ultrasonic sensor
- 1 x 25mm Durable omni-directional castor wheel
- 2 x 74mm wheels with all-terrain tyres
- 2x wheel connectors (compatible with most robotics RCV wheels on the market)
- 1x chassis interface plate
- 50+ aluminum plate construction pieces
- 200+ reusable nylon quick-build rivets
- 30+ cables and fixings
- 6x Colored balls

pi-top [4] Expansion Plate

Required for the Robotics Kit

- Integrated high accuracy 9DoF IMU with accelerometer, gyroscope and magnetometer
- Connectors for official Raspberry Pi camera (CSI) and display (DSI)
- Full Raspberry 40-pin GPIO socket
- 2x USB 2.0 ports
- 8x digital and 4x analog sensor ports
- 4x 6P 12V DC motor ports: H-Bridge closed-loop control with two independent hall effect sensor readings per motor giving double accuracy
- 4x 3P servo motor ports: open-loop position control with PWM pin
- USB-C PD port for power: use a standard 15V USB-C battery pack for extra port



\$159.95



\$39.95

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